

Student User Guide

Introduction

Welcome to SchoolMathPrep! The following "Student User Guide" provides step-by-step instructions on how to go through an online lesson!

Example Problems

Start the lesson by clicking **EXAMPLE PROBLEM 1** in the green area of the lesson interface, and a video of a teacher will appear to explain the problem.

Use the **CONTROL PANEL** to rewind, fast forward, or play the video again.

Go through each of the **EXAMPLE PROBLEMS** carefully to start the lesson, taking notes using paper and pencil if necessary.

NOTE: Example problems may be videos or audio animations.

The screenshot displays the SchoolMathPrep interface for a lesson titled "Lines and Slope". The interface is divided into several sections:

- Header:** "Lines and Slope" and "Using the Graph of a Line to Find Slope".
- EXAMPLES:** A green panel with the instruction "Find the slope of each of the given lines." and four numbered problems (1, 2, 3, 4) showing lines on coordinate planes. Problem 1 shows a line with a positive slope, Problem 2 shows a line with a negative slope, Problem 3 shows a horizontal line, and Problem 4 shows a vertical line.
- PRACTICE:** A section for practicing the concepts.
- Video Player:** A large window showing a teacher explaining the concept. The teacher is pointing to a graph on a whiteboard. The graph shows a line passing through points A and B. The formula $\text{slope} = \frac{\text{rise}}{\text{run}}$ is written on the board.
- Control Panel:** A row of buttons for navigation and interaction, including "DEEP THOUGHT", "Q", "A", "W", "Self Test", "Xtra Probs", "Notes", "Help", and "Quit".

Practice Problems

Next, click **PRACTICE PROBLEM 1**. The problem will then appear in the viewscreen. Using paper and pencil, copy the problem and work through it.

Lines and Slope
Using the Graph of a Line to Find Slope

EXAMPLES

Find the slope of each of the given lines.

1.

2.

3.

4.

PRACTICE

Find the slope of the given line.

1 2 3 4 5 6 7 8

? ✓ ✎ 🔊 1/2/3 ⏪ ⏩

DEEP THOUGHT Q A W Self Test Xtra Probs Notes Help Quit

Once you're finished, click the **CHECK** button in the lower left, and the answer will appear in the view screen.

If your answer is incorrect, and you're not sure what you did wrong, click the **HINT** button (question mark button) in the lower left, and a hint will appear in the viewscreen. Another use of the hint button is to help you get started on a difficult problem.

If the hint doesn't help, click the **WORK** button (paper and pencil button) to see all the work.

If you still need help, click the **AUDIO** button, and the problem will appear step-by-step in synch with an audio explanation from the teacher. Use the audio control panel if necessary.

Finally, if you click the **1/2/3** button and the **ARROWS** to the right of this button, you can move forward and backward through all the steps in the problem.

Next, click **PRACTICE PROBLEM 2**, and so on.

NOTE: The 1/2/3 button is not active in all lessons.

Deep Thought

After working through the practice problems, click the **DEEP THOUGHT QUESTION** button, and the deep thought question will appear in the view screen. Using paper and pencil, copy the problem and work through it.

The screenshot shows a software interface for a lesson on lines and slope. The left sidebar is titled "Lines and Slope" and "Using the Graph of a Line to Find Slope". It has an "EXAMPLES" section with the instruction "Find the slope of each of the given lines." and four coordinate planes labeled 1, 2, 3, and 4, each with a line graphed. Below the examples is a "PRACTICE" section. The main area on the right is black and displays the "DEEP THOUGHT" question: "What is the slope of the x-axis? The y-axis?". At the bottom, there is a navigation bar with buttons for "DEEP THOUGHT", "Q", "A", "W", "Self Test", "Xtra Probs", "Notes", "Help", and "Quit". There is also a numeric keypad and other function buttons like a question mark, checkmark, and calculator icon.

Next, click the **DEEP THOUGHT ANSWER** button to check your answer, and the **DEEP THOUGHT WORK** button for an audio explanation if necessary.

NOTE: The deep thought is designed as a challenge question for the lesson. However, problems like the deep thought are often included on the self-test and extra problems, so don't skip the deep thought!

Self-Test

After working through the example problems, the practice problems, and the deep thought, click the **SELF-TEST** button, and a multiple-choice self-test will appear.

To start the self-test, click **PROBLEM 1** on the self-test sheet. The problem will then appear in the view screen. Work the problem carefully using paper and pencil.

The screenshot shows a software interface for a self-test. On the left is a panel titled "Lines and Slope" with the subtitle "Using the Graph of a Line to Find Slope". Below this is a "SELF TEST" section with five numbered problems. Each problem has four oval buttons labeled A, B, C, and D. At the bottom of this panel are buttons for "MC" (Multiple Choice), a paper and pencil icon, "Help", and "Back". The right side of the interface is a large black area with the text "Find the slope of the given line." above a coordinate plane. The coordinate plane has a grid with x and y axes. A line is graphed passing through points A and B. Point A is at (-2, -1) and point B is at (2, 1). The line has a positive slope.

When you have your answer, click the **MULTIPLE-CHOICE** button ("MC" button in the lower left), and 4 possible answers will appear in the view screen.

To select your answer, click the **APPROPRIATE OVAL** on the self-test sheet (A, B, C, or D). You will then be notified whether or not you answered correctly and your self-test sheet will be marked accordingly.

Once you've selected your answer, you can click the **WORK** button (paper and pencil button) to see the work, or the **1/2/3** and **ARROW** buttons (if available) to go forward and backward through all the steps in the problem.

To go to the next problem, click **PROBLEM 2** on the self-test sheet, and so on.

NOTE: Each self-test problem is randomly selected from a large pool of problems covering the concepts in the lesson, so the self-test will be different every time you take it.

Self-Test (cont.)

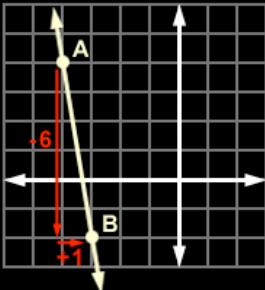
Once you have completed the self-test, you will receive a grade in the upper right-hand corner of the self-test sheet.

Lines and Slope
Using the Graph of a Line to Find Slope

SELF TEST $\frac{4}{5} = 80\%$

1.	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
2.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
3.	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
4.	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
5.	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D


Find the slope of the given line.



rise = -6
run = 1

$$m = \frac{\text{rise}}{\text{run}} = -\frac{6}{1} = \boxed{-6}$$

A. -6 B. $\frac{1}{6}$ C. 6 D. $-\frac{1}{6}$

MC 

Help Back

Click the **BACK** button to return to the main lesson interface.

Extra Problems

Next, click the **XTRA PROBS** button, and a worksheet of extra problems will appear.

The screenshot shows a web-based worksheet titled "Xtra Problems" under the "Lines and Slope" section. The interface includes a "Back" button in the top right. The main content area is titled "LINES & SLOPE" and "Extra Problems". Below this, the instruction "Using the Graph of a Line to Find Slope" is followed by the prompt "Find the slope of each of the following lines:". There are four numbered problems, each with a coordinate plane showing a line passing through points A and B. Problem 1 shows a line with a positive slope passing through (0, 1) and (1, 2). Problem 2 shows a line with a positive slope passing through (0, -1) and (1, 0). Problem 3 shows a line with a negative slope passing through (0, 1) and (1, 0). Problem 4 shows a line with a negative slope passing through (0, 2) and (1, 0). The interface also features a Macromedia FlashPaper logo, a search bar, a zoom level of 91%, and a print button in the top right corner.

To print the extra problems, click the **PRINT** button in the upper right.

Click the **BACK** button to return to the main lesson interface.

NOTE: Students often use the extra problems like a homework assignment. In other words, they print out the extra problems, work the problems on the printed sheet, and hand the problems into the teacher or parent for grading when they are complete.

Notes

Next, click the **NOTES** button, and a summary of the ideas covered in the lesson will appear.

The screenshot shows a web browser window with a title bar. The browser's address bar shows 'macromedia FLASHPAPER'. The page has a header with three buttons: 'Lines and Slope', 'Notes', and 'Back'. The 'Notes' button is selected. The main content area has a title 'LINES & SLOPE' and a subtitle 'Notes'. Below this is a section titled 'Using the Graph of a Line to Find Slope'. The content lists three points: I. To find the slope of a line, use the ratio **rise over run** between any two points on the line. II. Since the slope of a line is a fraction, remember to **reduce your slope if possible** at the end of the problem. III. The most common mistake made in problems involving slope is to mess up the **sign**. To avoid this mistake, use the following idea: If the line is going **uphill** from left to right, its slope must be **positive**. If the line is going **downhill** from left to right, its slope must be **negative**. The browser's status bar shows a zoom level of 91% and a print button.

Lines and Slope
Using the Graph of a Line to Find Slope

Notes

Using the Graph of a Line to Find Slope

I. To find the slope of a line, use the ratio **rise over run** between any two points on the line.

II. Since the slope of a line is a fraction, remember to **reduce your slope if possible** at the end of the problem.

III. The most common mistake made in problems involving slope is to mess up the **sign**. To avoid this mistake, use the following idea:

If the line is going **uphill** from left to right, its slope must be **positive**.

If the line is going **downhill** from left to right, its slope must be **negative**.

To print the notes, click the **PRINT** button in the upper right.

Click the **BACK** button to return to the main lesson interface.

Click the **QUIT** button to close the lesson and return to the lesson-listing page.

Extra Problem Solutions

Remember that each lesson has a worksheet of extra problems. The solutions to these problems can be found using the **XTRA PROB SOLUTIONS / TESTS** pull-down menu on the right-hand side of any page.

C: Distributive / Like Terms	Launch	TEST PREP COURSES Select... ▼
CHAPTER 2: EQUATIONS		
A: One-Step Equations	Launch	XTRA PROB SOLUTIONS / TESTS Select... ▼
B: Two-Step Equations	Launch	
A: Equations with Fractions	Launch	
B: Equations Involving Distributive	Launch	
A: Variable on Both Sides	Launch	
B: Variable on Both Sides / Fractions	Launch	
		OTHER LINKS Guided Tour

NOTE: In the same area of our site where we provide the extra problem solutions, we also provide printable **CHAPTER TESTS** and test keys for every chapter in our high school math courses.

Guided Tour

For a complete guided tour of an online lesson, click the **GUIDED TOUR** link, which is located on the right-hand side of any page.

A: Variable on Both Sides	Launch	OTHER LINKS Guided Tour Student User Guide (PDF) Browser Test Support Sign Off
B: Variable on Both Sides / Fractions	Launch	
C: Variable on Both Sides / Distributive	Launch	
A: Integer Solutions	Launch	
B: Decimal Solutions	Launch	
A: Fractional Solutions	Launch	
B: Beginning Formulas	Launch	
CHAPTER 3: WORD PROBLEMS		